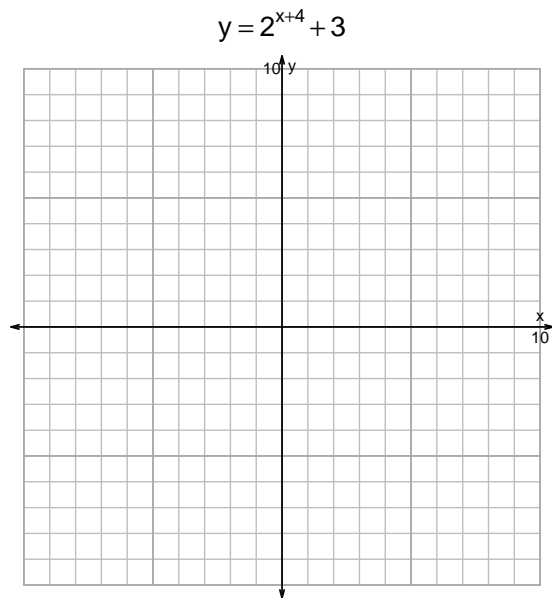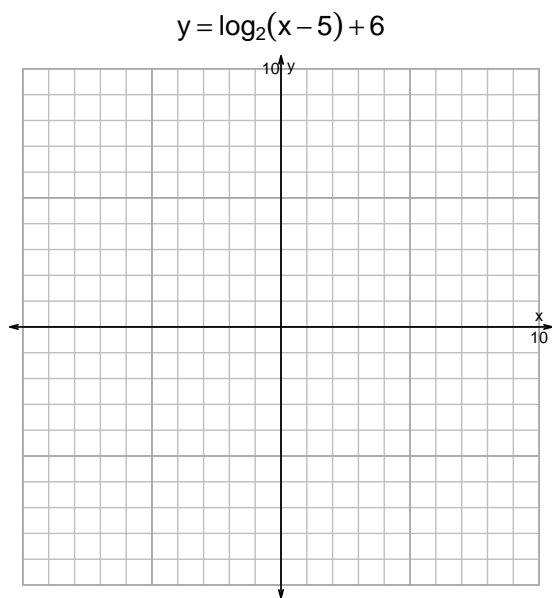Name: _____   Date: _____

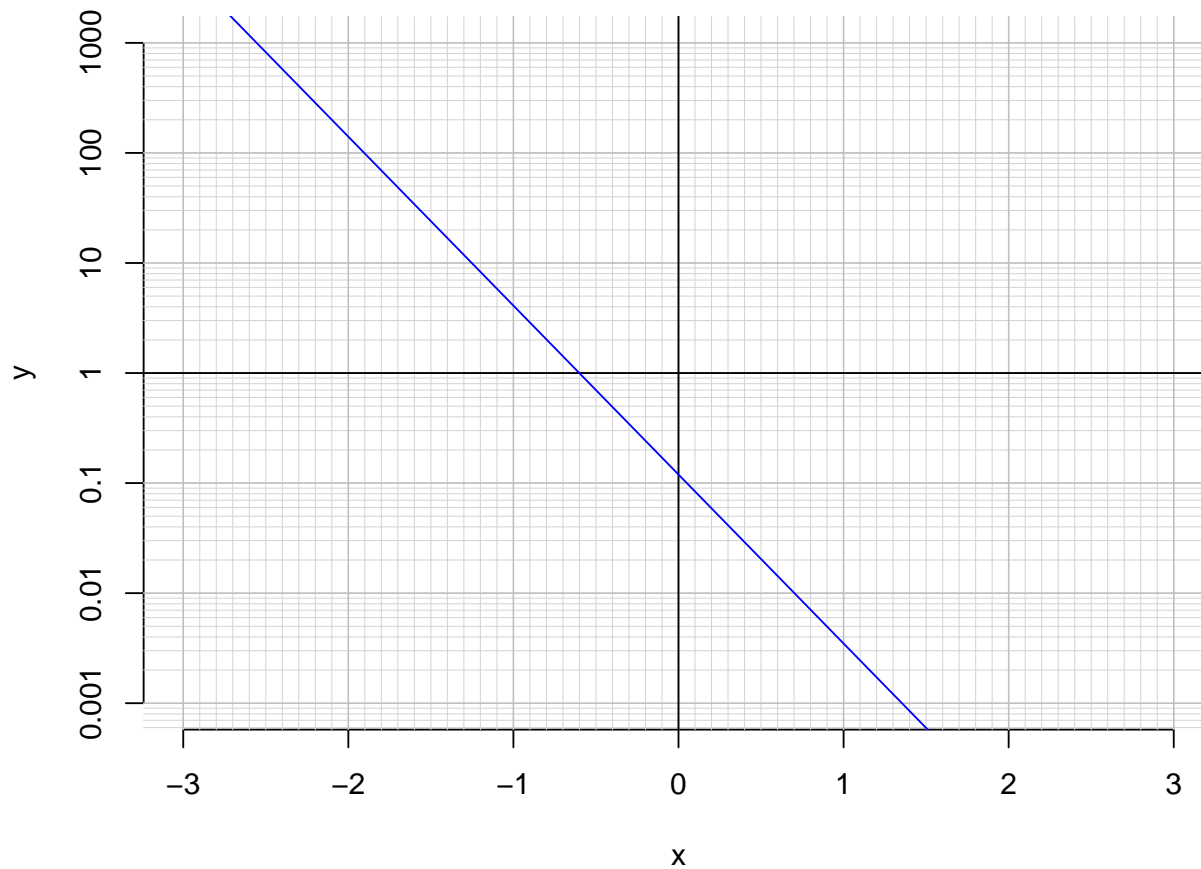## s18quiz: EXP LOG (QUIZ v289)

1. Graph $y = \log_2(x-5) + 6$ and $y = 2^{x+4} + 3$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = \log_2(x-5) + 6$$

$$y = 2^{x+4} + 3$$

2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-17 = \left(\frac{-4}{3}\right) \cdot 2^{-5t/7}$$

3. An exponential function $f(x) = 0.12 \cdot e^{-3.53x}$ is graphed below on a semi-log plot.

a. Using the plot above, evaluate $f(-2.1)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(0.7)$.